

Natural Areas Boundary Selection Guide

(A planning guide for use in boundary delineation when nominating a natural area for legal dedication)

Boundaries need to be carefully considered in the nomination of a natural area. Boundaries must be consistent with conditions and restrictions outlined in Michigan's Wilderness and Natural Areas legislation (Public Act 451 of 1994, Part 351). Natural area boundaries should be sufficiently large to ensure that ecological processes will be maintained so that the conservation targets and values that would lead to the dedication of the area can be sustained in the long-term. For example, wetland targets generally require that adjacent upland conditions are protected (i.e. within their natural range of variation) to maintain hydrologic processes, water quality, and linkages important to wildlife (e.g., reptiles and amphibians). If the proposed boundaries themselves are not sufficiently large to ensure protection of ecological processes and conservation targets, then the adjacent lands that help maintain these characteristics should have other protection mechanisms or designations that assure protection (e.g., conservation easements, management agreements).

A natural area boundary should be sufficiently large to allow for the implementation of anticipated conservation strategies necessary to maintain the conservation targets for the foreseeable future. For example, if conservation targets require periodic fire, the boundaries must be sufficiently large to allow for prescribed burning that effectively mimics natural fire regimes.

In the process of delineating boundaries, it may be useful to create and map "conservation zones" for each conservation target to better conceptualize the area necessary to ensure long-term viability of the targets. Information on threats to conservation targets may also influence boundary needs. It is important to determine and assess land use, ownership, and existing plans and agreements in adjacent areas to help identify potential implications (both beneficial and detrimental) to conservation targets.

In addition, identify existing easements (e.g., road or utility rights-of-way, drainage ditches) and mineral rights within the proposed boundary. Mineral extraction is prohibited within natural areas and areas where mineral rights are not controlled should be avoided. Lands with existing easements should be carefully considered before inclusion within the boundary, particularly when they will result in activities that may be incompatible with natural areas values. If areas under existing easements cannot reasonably be avoided, the potential for legal conflicts and impairment of the viability of conservation targets due to activities that may occur within the easement will be considered in review of the nomination. If areas important to the long-term viability of a conservation target are omitted due to existing easements or mineral rights, an "agreement" or other protection mechanisms may be pursued to avoid or minimize incompatible activities in those areas.

Permanent roads are prohibited within dedicated natural areas and must be avoided. Temporary roads should also be avoided unless they will be used only for emergency or management purposes. All other motorized vehicle use, (e.g., ORV, motorboat, aircraft) for purposes other than emergency or management, is prohibited in a dedicated natural area.

Current recreational use within the site boundaries should also be carefully considered. Does the boundary contain designated areas for recreational activities prohibited within a designated natural areas (e.g., ORVs, mountain biking)? The interests of recreational users should be

carefully weighed against the importance of including an area within the proposed boundary. Hunting, fishing and a wide variety of non-consumptive uses are *not* prohibited within natural areas.

For easier recognition by the public and land managers and for greater ease in writing legal descriptions, proposed boundaries should follow easily recognizable features and be straight whenever possible. Examples include road or other rights-of-way (without including them), existing legal boundaries, section, ½ section lines, property lines, etc.

Make sure to provide a map of the boundary area in digital form (i.e. GIS shape files) or on original USGS 7-minute topographic "Quad" maps. Hand-drawn maps may only be used to present supporting information. A boundary description must also be provided and may be either in terms of Town, Range and Section or a surveyor's description.

Questions to think about when defining a boundary:

- » Does the boundary encompass the ecological processes and conservation targets?
- » Are there existing protections or management plans on adjacent lands that help ensure the long-term maintenance of the ecological processes and conservation targets?
- Are mineral rights within the potential boundary area controlled by the surface landowner? If not, can these areas be avoided? Are there utilities or other easements within the nominated boundary that allow for activities that may conflict with natural areas values? Can these areas be avoided without compromising the values of the site?
- "> Is there a road or other expectation that motorized vehicle (e.g, ORV, motorboat, aircraft) use may occur within the nominated boundary? If so, is it realistic for motorized vehicle use to cease within the project area or can these areas be avoided?